

Abstract

The inventive method for estimating the total mass of a motor vehicle consists in estimating the vehicle mass (M) by a recursive least squares algorithm. Said method involves a vehicle longitudinal acceleration computing ($T_{\text{estimated}}$) according to a fundamental dynamic equation by analysing errors by means of an acceleration variation ($\delta_{\text{estimated}}(\Delta M, \epsilon, \alpha)$) caused by errors comprising a variation (ΔM) error of the vehicle mass with respect to a predetermined mass, the declivity error (α) of a surface on which the vehicle is placed and model (ϵ) errors, said declivity (α) being delivered by a declivity sensor (23) or by declivity estimation means.